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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,204	07/30/2003	Shanta M. Modak	A33459-PCT-USA-A (070050.	3145

21003 7590 06/02/2008

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EXAMINER	
CHOI, FRANK I	

ART UNIT	PAPER NUMBER
1616	

NOTIFICATION DATE	DELIVERY MODE
06/02/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/633,204	MODAK ET AL.	
	Examiner	Art Unit	
	FRANK I. CHOI	1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 November 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,7-16,19-31,33-37 and 39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,7-16,19-31,33-37 and 39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4,7-16, 19-31,33-37, 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raad et al. (US Pat. 5,688,516) in view of Domenico et al. (Journal of Antimicrobial Chemotherapy (1991)), WO 97/25085 and Darouiche et al. (US Pat. 6,719,991).

Raad et al. disclose that chelating agents, such as zinc citrate and citrate and bismuth, inhibit the formation of glycocalyx produced by staphylcococci and Candida which glycocalyx helps said organisms adhere and stick to catheter surfaces (Column 1, lines 60-68, Column 2, lines 1-11, Column 4, lines 44,48,49,65,66). It is disclosed that a tetracycline antibiotic, such as minocycline which is effective in killing adherent staphylococci embedded in glycocalyx, is combined with said chelating agent and coated on the medical device (Column 6, lines 2-13, 40-50, claims 1,9,10,11,14-17). It is disclosed that the combination of tetracycline antibiotic and chelating agent can vary between about 0.001 to about 1,000 mg/ml, preferably between about 1 to about 200, or from 10 to about 100 mg/ml of the chelating agent (preferably between about 20 to about 100 or about 20 to about 60 mg/ml), and between about 0.001 to about 1000 mg/ml (preferable between about 10 to about 200 or from about 2 to about 100 mg/ml) and non-glycopeptide antimicrobial agent (preferably between about 10 to about 100, or about 2 to about 9 mg/ml) (Column 6, lines 56-68). It is disclosed that in addition to said concentration ranges,

other concentration ranges for use in coating a medical device include between about 10 mg/ml and about 200 mg/ml of the non-glycopeptide antimicrobial agent, such as minocycline, and between 10mg/ml and about 200 mg/ml of the chelating agent with one embodiment including 60 mg/ml of each (Column 8, lines 8-23).

Domenic et al. disclose that effects on growth inhibition of bacteria is due to the bismuth ion, salicylate ions have an additive effect when combined with bismuth, and that bismuth subsalicylate is effective in inhibiting capsular polysaccharide production by bacteria which forms bacterial biofilm (Pages 801,808). It is disclosed that the activity of salicylate against bacteria is due in part to chelation of cations required by polysaccharide synthetic enzymes (Pg. 801).

WO 97/25085 disclose treating polymeric medical articles, such as vascular catheters, with 1-5 % chlorhexidine, such as chlorhexidine free base, diacetate, digluconate, 0.5-5% triclosan, and that silver sulfadiazine (.5-1 %) can also be included (Page 4, lines 13-15, Pages 5, 6, Page 7, lines 1-12). It is disclosed additional anti-infective agents such as benzalkonium chloride can also be added (page 14, lines 3-9). It is disclosed that in specific embodiments the impregnating solution comprises between 0.1 and 10% anti-infective agent (Page 13, lines 18-24).

Darouiche et al. ('991) disclose the combination of an antibiotic, such as minocycline, and antiseptic, such as chlorhexidine, triclosan or silver, for coating catheters (Column 4, lines 6-27, column 7, lines 8-36, Column 8, lines 16-35, Column 10, lines 4-21). An "effective concentration" is disclosed which is defined to mean that a sufficient amount of the antimicrobial agent is added to decrease, prevent or inhibit the growth of bacterial and/or fungal organisms;

that will vary for each compound and upon known factors such as pharmaceutical characteristics, the type of medical device, use and length of use, etc.; and that it is within the skilled artisan's ability to relatively easily determine an effective concentration for each compound (Column 7, lines 49-57).

The prior art discloses the combination of chelating agents, such as zinc citrate and citrate and bismuth, with minocycline to prepare antimicrobial medical devices, such as catheters. The difference between the claimed invention and the prior art is that the prior art does not expressly disclose the combination of minocycline and chlorhexidine, the combination of minocycline, triclosan and bismuth, or minocycline and bismuth for treating a polymeric-containing medical articles. However, the prior art amply suggest the same as the prior art discloses that chlorhexidine, such as chlorhexidine digluconate, acetate or free base, can be combined with triclosan, silver sulfadiazine and benzalkonium chloride for preparing antimicrobial catheters; that bismuth ion inhibits bacterial growth, that bismuth subsalicylate is effective in inhibiting the formation of capsular polysaccharide by bacteria which forms bacterial biofilm, and that salicylate is a chelating agent; and that minocycline can be combined with triclosan, chlorhexidine or silver for preparation of antimicrobial catheters.

"It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980) (citations omitted) (Claims to a process of preparing a spray-dried detergent by mixing together two conventional spray-dried detergents were held to be prima facie obvious.).

See also *In re Crockett*, 279 F.2d 274, 126 USPQ 186 (CCPA 1960) (Claims directed to a method and material for treating cast iron using a mixture comprising calcium carbide and magnesium oxide were held unpatentable over prior art disclosures that the aforementioned components individually promote the formation of a nodular structure in cast iron.); and *Ex parte Quadranti*, 25 USPQ2d 1071 (Bd. Pat. App. & Inter. 1992) (mixture of two known herbicides held prima facie obvious). As such, it would have been well within the skill of one of ordinary skill in the art to modify the prior art as above with the expectation that the combination of minocycline and chlorhexidine, including gluconate, diacetate and/or free base, would be effective in preparing an antimicrobial catheter; and that the addition of bismuth, including bismuth salicylate or bismuth citrate, benzalkonium chloride, triclosan, silver and/or zinc would provided additional antimicrobial activity in the antimicrobial catheter.

Further, in view of the amount ranges disclosed above, the prior art discloses ranges of the above compounds that fall within, encompass or overlap the claimed ranges. In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990) (The prior art taught carbon monoxide concentrations of "about 1-5%" while the claim was limited to "more than 5%." The court held that "about 1-5%" allowed for concentrations slightly above 5% thus the ranges overlapped.); *In re Geisler*, 116 F.3d 1465, 1469-71, 43 USPQ2d 1362, 1365-66 (Fed. Cir. 1997) (Claim reciting thickness of a protective layer as falling within a range of "50 to 100 Angstroms" considered prima facie obvious in view of prior art reference teaching that "for suitable protection, the thickness of the protective layer should be not less than about 10 nm [i.e., 100

Angstroms]." The court stated that "by stating that suitable protection' is provided if the protective layer is about' 100 Angstroms thick, [the prior art reference] directly teaches the use of a thickness within [applicant's] claimed range."). Further, "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955) (Claimed process which was performed at a temperature between 40°C and 80°C and an acid concentration between 25% and 70% was held to be prima facie obvious over a reference process which differed from the claims only in that the reference process was performed at a temperature of 100°C and an acid concentration of 10%.); See *In re Peterson*, 315 F.3d 1325, 1330, 65 USPQ2d 1379, 1382 (Fed. Cir. 2003)("The normal desire of scientists or artisans to improve upon that is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages.").

Examiner has duly considered Applicant's arguments but deems them unpersuasive.

The Supreme Court in *KSR International Co. v. Teleflex Inc.*, held the following:

(1) the obviousness analysis need not seek out precise teachings directed to the subject matter of the challenged claim and can take into account the inferences and creative steps that one of ordinary skill in the art would employ;

(2) the obviousness analysis cannot be confined by a formalistic conception of the words teaching, suggestion and motivation, or by overemphasis on the importance of published articles and the explicit content of issued patents;

(3) it is error to look only the problem the patentee was trying to solve-any need or problem known in the filed of endeavor at the time of invention and addressed by the prior art can provide a reason for combining the elements in the manner claimed;

(4) it is error to assume that one of ordinary skill in the art in attempting to solve a problem will be led only to those elements of prior art designed to solve the same problem-common sense teaches that familiar items may have obvious uses beyond their primary purposes, and in many cases one of ordinary skill in the art will be able to fit the teachings of multiple patents together like pieces of a puzzle (one of ordinary skill in the art is not automaton);

(5) it is error to assume that a patent claim cannot be proved obvious merely by showing that the combination of elements was "obvious to try". *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396, 1397 (U.S. 2007).

Contrary to the Applicant's arguments, a finding of obviousness can be based on common sense and motivation is not a required element of a prima facie case of obviousness.

The applicant argues that Darouiche et al. would not lead one skilled in the art to provide a coating material on a medical device without the presence of gram-negative bacteria. However, the Darouiche et al. disclosure cited by the applicant clearly indicates that coating of medical devices with antibiotics is commonly done. The fact that Darouiche et al. has provided an improvement does not make antibiotic coatings any less obvious or teach away from the same. "The use of patents as references is not limited to what the patentees describe as their own inventions or to the problems

with which they are concerned. They are part of the literature of the art, relevant for all they contain." *In re Heck*, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting *In re Lemelson*, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)). Further, "[a] known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." *In re Gurley*, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994) (The invention was directed to an epoxy impregnated fiber-reinforced printed circuit material. The applied prior art reference taught a printed circuit material similar to that of the claims but impregnated with polyester-imide resin instead of epoxy. The reference, however, disclosed that epoxy was known for this use, but that epoxy impregnated circuit boards have "relatively acceptable dimensional stability" and "some degree of flexibility," but are inferior to circuit boards impregnated with polyester-imide resins. The court upheld the rejection concluding that applicant's argument that the reference teaches away from using epoxy was insufficient to overcome the rejection since "Gurley asserted no discovery beyond what was known in the art." 27 F.3d at 554, 31 USPQ2d at 1132.).

Contrary to the applicant's arguments, WO 97/25085 does not require the use of polymer based solutions. The Applicant citation to page 4, lines 15-21 of said reference provides no evidence that the polymer solution is a requirement element in that the operative term is "may". In fact, the reference specifically indicates that the polymer is optional (Page 12, line 6).

The Applicant argues that the Examiner has used improper hindsight. However, "[a]ny judgement on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and does not include knowledge gleaned only from applicant's disclosure, such a reconstruction is proper." *In re McLaughlin* 443 F.2d 1392, 1395, 170 USPQ 209, 212 (CCPA 1971). Further, as indicated above, one of ordinary skill in the art will be able to fit the teachings of multiple patents together like pieces of a puzzle. In this case, the Examiner has provided the reasoning for modifying and/or combining the prior art which is based on the disclosure set forth in the prior art as indicated above.

Therefore, the claimed invention, as a whole, would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, because every element of the invention has been collectively taught by the combined teachings of the references.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned

with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-4,7-16, 19-31,33-37, 39 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-55 of US Pat. 6,106,505 in view of Raad et al. (US Pat. 5,688,516), Domenico et al. (Journal of Antimicrobial Chemotherapy (1991)), WO 97/25085 and Darouiche et al. (US Pat. 6,719,991).

Claims 1-55 of US Pat. 6,106,505 claim an anti-infective medical articles, such as an intravenous catheter, which have been impregnated with a solution containing the combination of 1-5% chlorhexidine free base and 0.5-5% triclosan, which can further contain silver sulfadiazine (See claims 1-55).

Raad et al. (US Pat. 5,688,516), Domenico et al. (Journal of Antimicrobial Chemotherapy (1991)), WO 97/25085 and Darouiche et al. (US Pat. 6,719,991) are cited for the same reasons as above and are incorporated herein to avoid repetition.

US Pat. 6,106,505 claims anti-infective medical articles, such as intravascular catheters, which contain the combination of chlorhexidine and triclosan, which can further contain silver sulfadiazine. The difference between the claimed invention and the claims of US Pat 6,106,505 is that said US Patent does not expressly claim the combination of minocycline and chlorhexidine, the combination of minocycline, triclosan and bismuth, or the combination of minocycline and bismuth for coating medical devices, such as intravascular catheters. However, the prior art amply suggests the same as indicated above. As such, it would have been well within the skill of one of ordinary skill in the art to modify the claims of the‘505 patent prior art

as above with the expectation that the addition of minocycline or minocycline and bismuth, including bismuth salicylate or bismuth citrate, would increase the antimicrobial activity of the antimicrobial medical device. Examiner recognizes that independent claim 39 of the present application does not recite either the use of chlorhexidine or triclosan. However, since it would be obvious to add minocycline and bismuth to claims of the '505 patent, said modification of the claims of the '505 patent would read on claim 39 of the present application. Further, it would have been well within the skill of one of ordinary skill in the art to use chlorhexidine gluconate, chlorhexidine free base and/or chlorhexidine diacetate in the claims of the '505 patent with the expectation that the same would be effective antiseptic agents for use in the medical devices and to add benzalkonium chloride or zinc citrate with the expectation that the same would increase the antimicrobial activity of the antimicrobial medical devices. Further, as indicated above, in view of the teachings of the prior art and the claims of the '505 patent, the claimed concentration ranges are *prima facie* obvious.

Examiner has duly considered Applicant's arguments but deems them unpersuasive. As indicated above, both the combination of the claimed antiseptics and antibiotics and concentrations thereof are disclosed or suggested by the prior art and claims of the '505 patent. As such, the obviousness double patenting rejection of claims 1-4, 7-16,19-37, 39 over the claims of the '505 patent is maintained.

Therefore, the claimed invention, as a whole, would have been an obvious modification of the claims of US Pat. 6,106,505 to one of ordinary skill in the art at the time the invention was made, because every element of the invention has been collectively taught by the combined teachings of said claims and references.

Claims 1-4,7-16, 19-31,33-37, 39 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of US Pat. 6,582,719 in view of Raad et al. (US Pat. 5,688,516), Domenico et al. (Journal of Antimicrobial Chemotherapy (1991)) and WO 97/25085.

Claims 1-15 of US Pat. 6,582,719 claim an anti-infective medical article prepared by exposing a polymer-containing medical article with a solution containing 1-8% minocycline and 1-8% chlorihexidine free base or chlorhexidine diacetate, which can further contain 0.5-2% bismuth nitrate and/or 0.2-1.0% benzalkonium chloride; a solution containing said minocycline, 1-8% triclosan and said bismuth nitrate, which can further contain said benzalkonium chloride; a solution containing said minocycline and said bismuth nitrate; and intravascular catheters containing the combination of minocycline and chlorhexidine free base or chlorhexidine diacetate, which can further contain bismuth nitrate, benzalkonium chloride, silver sulfadiazine or silver carbonate; or the combination of minocycline, triclosan and bismuth nitrate, which can further contain benzalkonium chloride or silver carbonate (See claims 1-15).

Raad et al. (US Pat. 5,688,516), Domenico et al. (Journal of Antimicrobial Chemotherapy (1991)) and WO 97/25085 are cited for the same reasons as above and are incorporated herein to avoid repetition.

US Pat. 6,582,719 claims anti-infective medical articles, such as intravascular catheters, which contains the combination of minocycline and chlorhexidine; the combination of minocycline, triclosan and bismuth; and the combination of minocycline and bismuth. The difference between the claimed invention and the claims of US Pat 6,582,719 is that said US Patent does not expressly claim the use of bismuth citrate or bismuth salicylate, chlorhexidine

gluconate or zinc salt. However, the prior art suggests the same as indicated above. As such, it would have been well within the skill of one of ordinary skill in the art to modify the claims of the '719 to use bismuth citrate or bismuth salicylate in place of or in addition to bismuth nitrate with the expectation that the chelating activity of the salicylate or citrate would provide increased antibacterial activity, that zinc citrate would increase the antimicrobial activity of the antimicrobial medical device, and that to use chlorhexidine gluconate, chlorhexidine free base and/or chlorhexidine diacetate with the expectation that the same would effective antiseptic agents for use in the medical devices. Further, as indicated above, in view of the teachings of the prior art and the claims of the '719, the claimed concentration ranges are *prima facie* obvious.

The Examiner acknowledges the Applicant's statement that a terminal disclaimer will not be filed as to the '719 patent until allowable subject matter is indicated. As such, the obviousness double patenting rejection of claims 1-4, 7-16,19-37, 39 over the claims of the '719 patent in view of the prior art is maintained.

Therefore, the claimed invention, as a whole, would have been an obvious modification of the claims of US Pat. 6,582,719 to one of ordinary skill in the art at the time the invention was made, because every element of the invention has been collectively taught by the combined teachings of said claims and references.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

A facsimile center has been established in Technology Center 1600. The hours of operation are Monday through Friday, 8:45 AM to 4:45 PM. The telecopier number for accessing the facsimile machine is 571-273-8300.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Choi whose telephone number is (571)272-0610. Examiner maintains a compressed schedule and may be reached Monday, Tuesday, Thursday, Friday, 6:00 am – 4:30 pm (EST).

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Johann R. Richter, can be reached at (571)272-0646. Additionally, Technology Center 1600's Receptionist and Customer Service can be reached at (571) 272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frank Choi
Patent Examiner
Technology Center 1600
May 31, 2008

/Johann R. Richter/
Supervisory Patent Examiner, Art Unit 1616